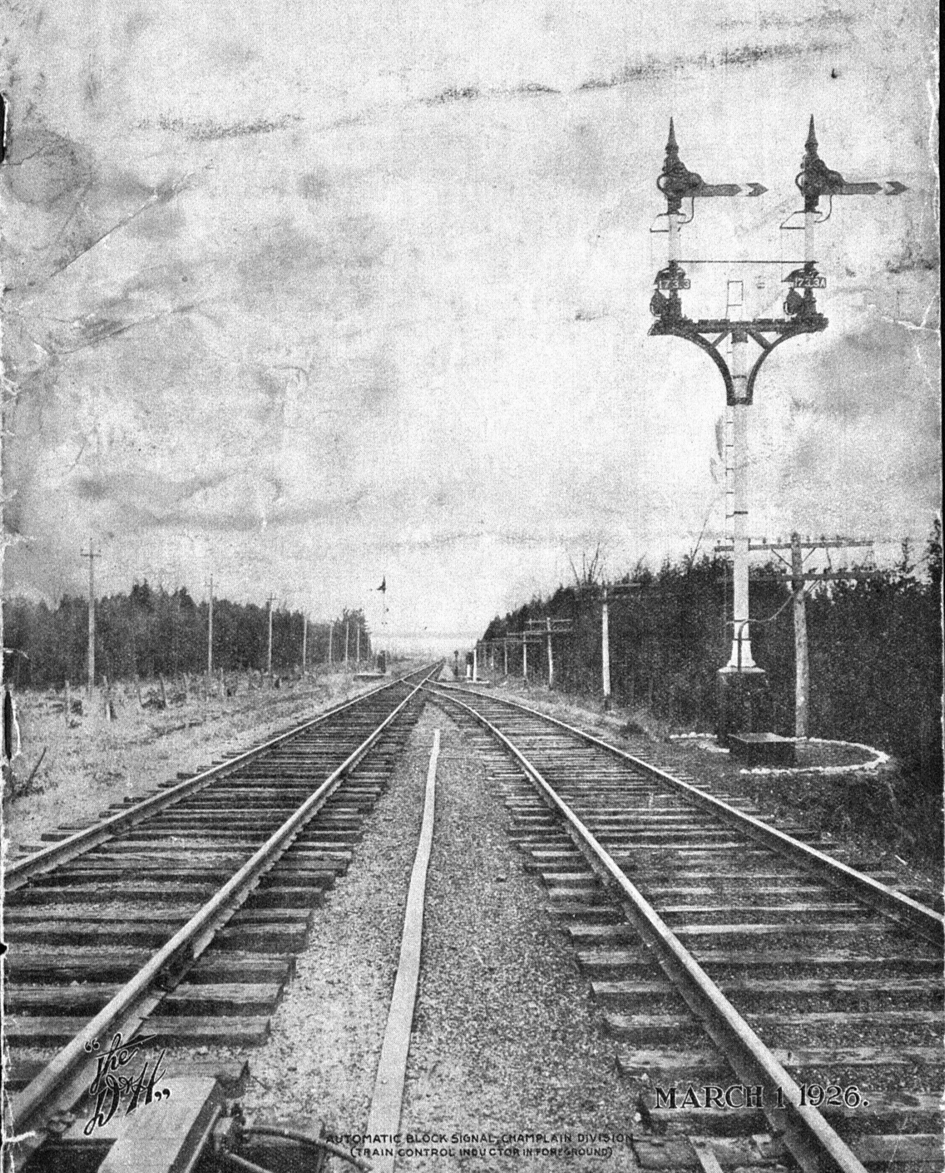
THE DELAWARE AND HUDSON COMPANY BULLETIN



AUTOMATIC BLOCK SIGNAL, CHAMPLAIN DIVISION
(TRAIN CONTROL INDUCTOR IN FOREGROUND)

“The D&H,”

MARCH 1, 1926.

THINK

THE PHILOSOPHY of safety is constant, continuous and continual thought. You cannot afford to be off your guard a single minute. If your mind is loafing up town, while your hand is at work, you are liable to have your hand crushed, while your mind is away. The mind should be the director general for every movement of your body. If you are a rattle-brained thinker, you will be a rattle-brained worker. If men in the shops and offices and on the trains and the track would get the safety habit, it would not only prolong their days, but would be the best financial investment, as they would become more efficient, command larger salaries, and make more careful investments with their hard-earned money.

WALT HOLCOMB

The
DELAWARE AND HUDSON COMPANY
BULLETIN

Vol. 6 Albany, N. Y., March 1, 1926 No. 5

Always Treated Fairly

Retired Engineman Believes Our Jobs Are What We Make Them, and Has Only Words of Commendation for Officials of the Company and Associates

"BUT," observed HENRY A. MILLER of No. 22 Lyons Avenue, Menands, N. Y., a retired locomotive engineer, as he commented on the storm that blanketed the East in heavy white during the early days of February. "I've seen it worse than this many a time." Then, as if to prove his statement, he recalled in an interesting way his experiences of some forty years ago when as an engineer, he had battled his way through storms that often piled the snow into drifts ranging in depth up to eighteen feet. "Why, I had the little 'hundred thirty-eight' on the Schenectady branch, and she could chew her way through anything," he declared, and added with a smile, "She certainly was a bird."

HENRY A. MILLER

A typical railroad man of the "old school," he is a very interesting person with whom to talk over "old times." For fifty-three years, all but ten of which were passed on The Delaware and Hudson, his workaday life was spent on locomotives. And during that time, he became not only a student of the mechanical phases of his employment, but extended his study, also, to include the human element. As a result, he gained from his experiences a wealth of ideas and opinions that should prove helpful to railroad workers as a class. In this, he was fortunate, perhaps, in being influenced by the conviction that our conditions of employment are largely what we make them, that our attitude toward our work is an all-important factor in the success we may attain, and that it is well always to look at both sides of a problem that involves both the employe and employer, and avoid hasty conclusions.

As secretary of a Brotherhood of Locomotive Engineers' grievance committee for twenty years, he had a splendid opportunity to put his convictions to a test, and with a result that he never for a moment lost confidence in them. He declares that never during that time was he treated in other than a courteous manner. "The officials are a mighty fine lot of men, and it is a pleasure, indeed, to work for a Company like The Delaware and Hudson," he adds as a tribute to his associations of more than forty years.

"You liked railroad work, then?" he was asked.

"Oh, boy, I'll say I did," he replied enthusiastically. "I came here on January 1, 1880, as an engineer, and took a freight run between Schenectady and Port Henry, on trains Nos. 31 and 32. At Whitehall we picked up a passenger coach and brought it back that far with us. There were not many trains on the Champlain division in those days, and most of them carried a coach.

"I had started with the New York Central in

'73, at Rochester, on the Western division. That was before they had four tracks. But prior to that, in '68, I think it was, I worked between Albany and Syracuse on the *Steamboat* express, as a news butcher for the Union News Company, and "Paddy" Ackart, who died only recently, was selling papers on the old *Cincinnati*.

"Then I went to work in the Schenectady Locomotive Works at Schenectady, as an apprentice, learning the tin and coppersmith's trade, and stayed my four years. I worked on locomotives most of the time and it wasn't long before I got to thinking I would like to be an engineer. So when I finished my time, I went to the Central. I fired for about four years and then went running as an engineer in freight service, either to Niagara Falls, Buffalo or Syracuse.

"When I came to the D. & H., I first got the *Ballston*, or No. 141, a freight and passenger engine. It was a four-wheel Dickson lump burner and there were six of its class, beginning with the No. 139. It was one of the slickest engines I ever saw; a dandy sure enough. The flag staffs on the front end were about four feet high, and of brass; the staffs on the lamp brackets were of brass, too; and there was a brass pump, brass check covers; brass domes, and a brass chime whistle three feet long, I should say. The pipes were all of copper. After every trip, before it went into the house, the fireman and brakeman would go over it with sperm candles, and they would be back early the next morning to scour and polish the brass and copper before going out on the road. An engineer who found dirt anywhere on his engine when he reported for work, was insulted.

"There were two first-class passenger engines on the road then, the *City of Troy* and the *Saratoga*. And they were dandies, too. They thought so much of them that they were kept in the house all winter long rather than to expose them to the bad weather and hard going.

"Then there was the *Dandie Dinmont*, No. 107, named after one of Scott's characters. You couldn't stall her any place. She was a Dickson mogul. I ran her after I got through with the *Ballston*. We thought they were all world-beaters, of course. But when I recall them now it nearly makes me laugh—we could almost pick them up, they were so little.

"The first ten-wheelers, and they were the first hard coal burners, too, were the *Rutland* and *Ticonderoga*. The *Montreal*, No. 138, was the first passenger engine to burn hard coal, and I ran her out of Schenectady for five years. I'll tell you just what kind of an engine she was. It is up grade out of Ballston and a mighty hard pull. We had seventeen coaches on one occasion and there were so many passengers aboard that it was almost impossible for the conductor to get all the tickets so we lolled along, then we took slack and got out of there all right.

"I was on Nos. 31 and 32 for about nine years, altogether. Charles Chase, who died some years since, was my first conductor. I had known him when he was a conductor on the Central while I was employed there. And then I had Johnnie Miles and Jim Ingram.

"When William Spoor, engineer on the Schenectady passenger trains Nos. 151 and 158, died, I fell heir to his job. With John Heffenan, who is now employed by the General Electric Company at Schenectady, as conductor, we made four trips daily between Schenectady and Saratoga Springs, and every Sunday during the summer season we ran, also, to North Creek. I was on that run for twenty-five years and averaged 176 miles a day. I also did the first switching at the General Electric Company's plant in Schenectady.

"In 1912, I began running between Rutland and Albany, arriving in the latter city at 11:50 a. m., and leaving, as a local between Albany and Troy, at 4:55 p. m. At Troy we turned on the wye and headed for Rutland. Charles Frost, who has since died, was my conductor. GENE RICHARDS, who now holds the run, succeeded me when I took the milk train running via the R. & W., and Whitehall. That run I held until I fractured my hip in a fall at Rutland on January 2, 1918. I was off until August, that year, and then I went back on the milk train but found I couldn't stand the work. My last job was in the coach yard at Colonie. I was pensioned on January 1, 1923."

Several unfortunate experiences caused him to suffer injury, but the most aggravating of these was the result of a stone being thrown through the engine cab window as he was passing through Round Lake on February 1, 1919. He was making about sixty miles an hour when the stone hit him across the nose. It was a severe blow. Realizing that he was seriously hurt, but how seriously he did not know, he bound the cut together with the pressure to be had from his right hand and did not stop for first aid treatment until he reached Mechanicville. The nose had been cut to the bone, in fact it had been nearly severed, and an ugly tell-tale scar is the result.

Among his relics there is one, though not associated with the railroad in any way, that he prizes most highly. It is Letters Patent issued by John Jay, governor of New York State, on March 19, 1800, and signed also by Daniel Hale, secretary, and Ogden Hoffman, attorney general, granting William Lighthall, his great grandfather, "late a lieutenant in the Army of the United States," 1,200 acres of land in the Township of Sterling, County of Cayuga. A narrow purple ribbon was used as a seal. Strange to say, how-

(Concluded on Page 13)

Form Railroad Club

Movement to "Promote Cooperation and Exchange of Ideas" Finds Enthusiastic Support Among the Supervisory Officers on the Pennsylvania Division

FOR the purpose of "promoting cooperation and an exchange of ideas between various departments of the Pennsylvania division," The Delaware and Hudson Railroad Club—Pennsylvania Division, was organized at Carbondale, on December 23, last. This organization is unique among the many other similar groups on our system, the inception of which has been inspired by an appreciation of the good that may result from a mutual exchange of ideas and the development of a better acquaintance among their members, in that it aims to bring together the supervisory officers of *all* departments on a single division, thereby creating, in a general way, greater interest and cooperation through the acquisition of an appreciative understanding of the duties and problems peculiar to each branch of the service.

Credit for the formation of the organization is due, largely, to the efforts of M. F. Clune, trainmaster, and H. L. Symons, road foreman of engines, which, as may be seen, were heartily endorsed by C. A. Morgan, division superintendent, and all other divisional officers. The membership, limited to the supervisory officers of the division, now totals 149, enrolled by departments as follows: Transportation, sixty-five; Motive Power, thirty-seven; Car, twenty-two; Maintenance of Way, ten; Accounting, six; Signal and Electrical, two; Stores, four; and Legal one.

Mr. Morgan is president of the club; Mr. Clune, vice-president; D. J. Buckley, division accountant, secretary; F. W. Lewis, division clerk, financial secretary; and J. J. Brennan, master mechanic, treasurer. Mr. Morgan also heads the executive committee and with him are associated, for its particular work, Mr. Clune, Mr. Buckley, Mr. Lewis, Mr. Brennan, M. J. McDonough, division engineer; J. W. Howard, divisional car foreman; and Mr. Symons. Others who joined as members at the time of organization and not previously mentioned, included, Martin Crippen, claim agent; F. C. Timmons, electrical supervisor; R. J. Pomeroy, division storekeeper; A. J. Reed, division storekeeper, Maintenance of Way department; N. S. Burns, rules examiner; M. J. Cantwell, assistant trainmaster; J. P. Dunlap, signal supervisor; P. E. Jaynes, assistant trainmaster; B. B. Lyden, chief dispatcher; H. E. Morgan, division agent; T. P. Murphy, assistant road foreman of engines; J. J. Boyle, power distributor; A. W. Quinney, assistant road foreman of engines; E. A. Reardon, chief dispatcher; and K. Spiegel, car distributor.

Meetings are to be held monthly in Trinity Parish hall, Carbondale, and at such other times as the President may consider a special session necessary. It was planned, in the beginning, to meet in Division headquarters, where the first formal meeting was held on January 5, but the membership grew so rapidly as to at once overtax the accommodations afforded there and it became necessary to make other arrangements, temporarily at least.

President Morgan presided at the January meeting and, following adoption of the constitution and by-laws as drafted by the executive committee, outlined in a definite and concise way the policies of the club, as well as some of its plans for the future. Talks by members will be a feature of each meeting and this practice was inaugurated by Mr. Clune, the vice-president, who discussed in a very thorough and comprehensive manner, "Language—The Medium of Human Exchange."

A tentative program of future meetings, follows:

February 2—"History of The Delaware and Hudson Company, by Mr. Clune; and "Duties of Yardmasters and Their Relations with Shippers," by H. N. Atherton, yardmaster at Green Ridge.

March 2—"History of The Delaware and Hudson Company (continued), Mr. Jaynes; and "Yard Operation," E. J. Foley, yardmaster at Carbondale.

April 6—"Roundhouse Organization and Preparation of Locomotive to Turntable Ready for Service," Arthur Chabott, roundhouse foreman at Carbondale; and "Car Department Organization," R. C. Schuster, Car department foreman, Carbondale.

May 4—"Economical Operation of Locomotives," Mr. Symons; and "Maintenance and Operation of Freight Train Cars by Car Department," Mr. Howard.

Mr. Clune's talk on "Language—The Medium of Human Exchange," which will be found not alone interesting, but helpful, follows:

Language—The Medium of Human Exchange

By M. F. CLUNE, *Trainmaster*, Pennsylvania Division.

THE object of our organization is: "To promote cooperation and exchange of ideas between the various departments of the division."

To interchange an idea we must be able to state it clearly. Every transaction in our daily business, whether with the lowest paid member of our forces or with a committee representing the largest labor organization with which we have to deal, passes through an intensely critical stage in which all depends upon how we express ourselves, in writing or in the more delicate medium of speech. A moment's reflection must convince anyone of the truth of this statement.

Almost in the same thought follows that anyone who expects to handle important affairs should prepare himself for putting his proposals through at this crucial point. It is a mistake to think that even the greatest and most logical courses of action will win approval on the soundness of the proposition alone. How often is it that after we have collected data and studied a proposition with great care so that our own mind is made up as to the best solution for the problem, we feel that our work is about completed? Usually, however, when our own mind is made up, our task is only half done. The larger and more difficult part of the work is to convince the minds of others that the proposed solution is the best one—that all our recommendations are really necessary. Time after time it happens that some one will upset the carefully thought-out plan of a man who knows the facts, simply because the man with the facts cannot present them readily enough to overcome the opposition. It is often with much chagrin that a person having the knowledge sees some other conclusion accepted, or some wrong policy adopted, just because known facts cannot be marshalled and presented in such manner as to be effective.

Business today depends, we understand, upon the swift and accurate working of the vast systems of communication and transportation—on the mail service, the radio, the telegraph, the telephone, the airplane, the steamship and railroad.

But language, the means of communication between man and man in daily life, is itself the basis of all these devices. It is the common carrier for all business. We speak of money as the medium of exchange, in terms of which all property values are measured and transfers determined. With equal truth we may say that the actual medium of human exchange is language, in which every thought must be minted before it is intelligible to other people. A ready and full command of language is essential for us for two reasons:

(1) Because of its use in directing or influencing other persons by means of reasoning and persuasion.

(2) Because of its use in the conveyance of plain information.

Hardly a day passes in the business and personal life of every one of us but that some matter in which we are concerned is turned towards success or failure according to the skill with which a letter is drafted or an interview directed.

Language is so close to us that we fail to appreciate either the need or the difficulty of conscious control, or, on the other hand, the possibility of developing such control. The average man—you and I—feel that we talk and write well enough. This notion is far from fact. A few of the forms in which language is used in the conduct of our business operations may be roughly classified as follows:

(1) Ordinary talk—conversation.
(2) Letters.
(3) Instructions and orders.
(4) Reports.

Have we all ready and sure mastery of these language forms? Can one man in ten discuss a matter before a group of listeners clearly, interestingly, briefly, and so as to win assent? Are his letters good, discreet and winning? Most letters are a waste of good paper. Does his ordinary conversation with his subordinates or his associates hold attention, please, gain information, or help his department run more smoothly? I have read somewhere a remark attributed, I believe, to Mr. Charles Schwab:

"One of the chief difficulties of an executive is to induce his subordinates and his associates to say what they mean."

We think of language in terms of our childhood experiences with reading, writing and grammar.

Command of language has been defined as ability to present any given thought of suggestion-of-action to another person in such a way as to win agreement and cooperation. This involves, whenever we talk or write, the power of taking clear account of—

(1) The idea or suggestion to be conveyed.
(2) The person to be reached.
(3) The properties of the medium used.

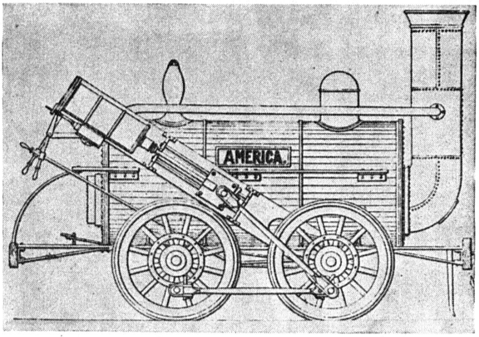
(Concluded on Page 14)

Introduced First Locomotive

Credit for Introduction and First Use of the Steam Locomotive in America, which was in 1829, Belongs to Our Company

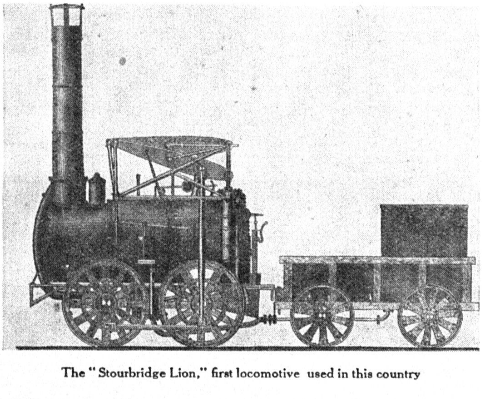
By W. J. COUGHTRY

CREDIT for the introduction and first use of the steam locomotive, the chief factor in the growth of our commerce and transportation in the Western Hemisphere, belongs to The Delaware and Hudson Company which received its charter from the State of New York on April 23, 1823.



First Locomotive to Reach America

In constructing its canal, then the only recognized practical means of transportation in this country, from the Hudson river to the coal bed at Carbondale it became necessary to locate its western terminus at the headwaters of the Lackawaxen river at the forks of the Dyberry, now Honesdale, as its continuance across the Moosic mountains, which lie between Honesdale and Carbondale, was not feasible. John B. Jervis, then chief engineer, adopting the view of his predecessor, Benjamin Wright, worked out a plan for a railroad across these mountains. This plan divided the railroad into two parts—inclined planes and levels. On the inclined planes loaded and empty wagons, as cars were then called, were to be raised and lowered by means of chains and ropes driven by stationary engines or by water power, and on the levels the track was to be constructed with descending grades to enable the loaded cars to move by gravity. The use of the locomotive was planned for the return movement of the empty cars. This plan the Board of Managers adopted and Horatio Allen, an assistant engineer in the Company's service was sent to England where locomotives had been but recently put into use, to study their operation and if found practical to contract for four locomotives for use on the levels, and for iron rail for the entire road.



The "Stourbridge Lion," first locomotive used in this country

Mr. Allen left New York on January 24, 1828, arrived at

(Continued on Page 11)

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Delaware and Hudson Company
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Office of Publication :
DELAWARE AND HUDSON BUILDING,
ALBANY, N. Y.

PUBLISHED semi-monthly by The Delaware and Hudson Company for the information of the men who operate the railroad, in the belief that mutual understanding of the problems all have to meet will help us to solve them for our mutual welfare.

Permission is given to reprint, with credit, in part or in full, any article appearing in THE BULLETIN.

Vol. 6 March 1, 1926 No. 5

" . . . Ere I descend to the grave
May I a small house and a large garden have;
And a few friends, and many books, both true,
Both wise, and both delightful, too."
—Abraham Cowley, in his poem " The Wish."

Passing Thoughts

What a wonderful feeling!

Did you notice how the ending of the long protracted coal strike affected the weather? Zero temperatures that had prevailed, unbroken, for a week or more, capitulated almost immediately. Evidently, the weather man was as well pleased with the news that issued from Philadelphia, as were we.

And now we get busy!

Good times are with us again and there is reason, indeed, for rejoicing. Busy days, and busy nights, are ahead; likewise, many grave problems. To our backs are the many months of doubt and anxiety, and discouraging financial losses, not soon to be forgotten. To retrieve these losses should be the first thought of all. As employes, we can help in this, greatly, by combining efficiency and the practice of thrift with a maximum of service. Our success depends entirely upon the success of the Company that employs us; conversely, the success of the Company depends in no small way upon the good-will of its employes.

It is spreading!

That there is a growing appreciation among various groups of employes of the need for cooperation, which also is helpful from a Company standpoint, is reflected in the voluntary creation of such organizations as The Delaware and Hudson Railroad Club—Pennsylvania Division, reported elsewhere in this issue; the Supervisors' Associations of the Motive Power and Car departments, and all others that have for their object greater cooperation, a mutual exchange of ideas, and a better acquaintance. To become well informed upon problems of mutual interest is but to become possessed of a better understanding which is the great need in today's world of business affairs.

Messengers of hope!

Like an unheralded conquerer, Group Insurance benefits, real messengers of hope and consolation, speed their way into the stricken homes of our employes. Unwritten—yes, even untold—are the many stories of their missions of mercy. Recently there dropped dead one of our employes who had steadfastly refused to subscribe to the plan, but finally did so because he thought it would please his " boss." Friends who went to the home to inform the widow of his untimely death, found her with less than a dollar with which to provide for herself and three dependent grandchildren. Words are incapable of telling just what the check for death benefits meant to that home. Our *need* of Group Insurance is obvious, however.

You noticed it, too, perhaps!

In many parts of the country the efficiency of the motor bus was put to a test in the heavy snow that fell during the early part of February, and failed completely to render the service that devolves upon a common carrier. Consequently, there was a " Back to the Railroad " rush in those localities where travelers could avail themselves of such accommodations, and in one instance, that of the Ulster and Delaware, additional trains were placed in service for the convenience and accommodation of the traveling public which in months past had patronized bus lines. Are we to think, however, that the reliable service offered by the railroads is again to be ignored as soon as road conditions are conducive to highway travel?

The Leaders

The higher men climb, the longer their working day. And any young man with a streak of idleness in him might better make up his mind at the beginning that mediocrity is to be his lot. Without immense, sustained effort he will not climb high. And even though fortune or chance were to lift him high, he would not stay there. For to keep at the top is harder, almost, than to get there. There are no office hours for for leaders.—Cardinal Gibbons.

When deeds pull down, words can repair no faith.—CHAPMAN.

Visited Albany In 1796

Later, Isaac Weld, Jr., a Native of Ireland, Wrote Interestingly of the City and the Country to the North Now Traversed by Our Road

(Continued from Last Issue.)

EARLY the next morning we left Ticonderoga, and pursued our voyage to Crown Point, where we landed to look at the old fort. Nothing is to be seen there, however, but a heap of ruins; for shortly before it was given up by the British the powder magazine blew up, by which accident a great part of the works was destroyed; since the evacuation of it also, the people in the neighbourhood have been continually digging in different parts, in hopes of procuring lead and iron shot; a considerable quantity was in one instance got out of the stores that had been buried by the explosion. The vaults, which were bomb proof, have been demolished for the sake of the bricks for building chimneys. At the south side alone the ditches remain perfect; they are wide and deep, and cut through immense rocks of lime-stone; and from being overgrown towards the top with different kinds of shrubs, have a grand and picturesque appearance. The view from this spot of the fort, and the old buildings in it overgrown with ivy, of the lake, and of the distant mountains beyond it, is indeed altogether very fine. The fort, and seven hundred acres of good cleared land adjoining to it, are the property of the state of New York, and are leased out at the rate of one hundred and fifty dollars, equal to 33£ 10s. sterling per annum, which is appropriated for the use of a college. The farmer who rented it told us, he principally made use of the land for grazing cattle; these, in the winter season, when the lake was frozen, he drove over the ice to Albany, and there disposed of.

Crown Point is the most advantageous spot on the shores of Lake Champlain for a military post, not being commanded by any rising grounds in the neighbourhood, as Ticonderoga is, and as the lake is so narrow here, owing to another point running out on the opposite side, that it would be absolutely impossible for a vessel to pass, without being exposed to the fire of the fort. The Indians call this place Tek-ya-dough-nigarigee, that is, the two points immediately opposite to each other; the one opposite to Crown Point is called Chimney Point; upon it are a few houses, one of which is a tavern. While we staid there we were very agreeably surprised, for the first time, with the sight of a large birch canoe upon the lake, navigated by two or three Indians in the dress of their nation. They made for the shore and soon landed; and shortly after another party, amounting to six or seven, arrived, that had come by land.

On board our little vessel we had a poor Canadian, whom we took in at Skenesborough. Tempted by the accounts he had heard of the United States, he quitted his own home in Canada, where he lived under one of the seigniors, and had gone as far as Albany, in the neighbourhood of which place he had worked for some time with a farmer; but finding, that although he got higher wages he had to pay much more for his provisions than in Canada, and that he was also most egregiously cheated by the people, and particularly by his employer, from whom he could not get even the money he had earned; finding likewise that he was unable to procure any redress, from being ignorant of the English language, the poor fellow determined to return to Canada, and on his way thither we met him, without a shilling in his pocket.

Having asked this little fellow, as we sailed along, some questions about the Indians, he immediately gave us a long account of a Captain Thomas, a chief of the Cachenonaga nation, in the neighbourhood of whose village he said he lived. Thomas, he told us, was a very rich man, and had a most excellent house, in which he said he lived as well as a seignior, and he was sure we would be well received if we went to see him; he told us also that he had built a church, and was a Christian; that he was very charitable, and that if he were acquainted with his present distress he would certainly make him a present of four or five dollars. "Oh, je vous assure, messieurs, que c'est un bon sauvage." It was impossible not to smile at the little Canadian, who, half naked himself, and nearly as dark as a mulatto, concluded his panegyric upon Thomas, by assuring us, "he was a good savage;" at the same time we felt a strong desire to behold this chief, of whom we had heard so much. It was not long before we were gratified, for the party of Indians that arrived whilst we were at Chimney Point were from the Cachenonga village, and at their head was Captain Thomas.

Thomas appeared to be about forty-five years of age; he was nearly six feet high, and very bulky in proportion: this is a sort of make uncommon among the Indians, who are generally slender. He was dressed like a white man, in boots; his hair untied, but cut short; the people who attended him were all in the Indian habit. Not one of his followers could speak a word of English or French; Thomas, however, could himself speak both languages. English he spoke with some little hesitation and not correctly; but French seemed as familiar to him as his native tongue. His principal attention seemed to be directed towards trade, which he had pursued with great success, so much so, indeed, that, as we afterwards heard, he could get credit in any store in Montreal for five hundred pounds. He had along with him at Chimney Point thirty horses and a quantity of furs in the canoe, which he was taking for sale to Albany. His people, he told us, had but a very few wants; he took care to have these always supplied; in return they brought him furs, taken in hunting; they attended his horses, and voluntarily accompanied him when he went on a trading expedition; his profits therefore must be immense. During the course of conversation he told us, that if we came to see him he would make us very happy; that there were some very handsome squaws* in his village, and that each of us should have a wife; we promised to visit him if it was in our power, and parted very good friends. Thomas, as we afterwards found, is not a man respected among the Indians in general, who think much more of a chief that is a good warrior and hunter, and that retains the habits of his nation, than of one that becomes a trader, and assimilates his manners to those of the whites.

Lake Champlain is about one hundred and twenty miles in length, and is of various breadths; for the first thirty miles, that is, from South River to Crown Point, it is in no place more than two miles wide; beyond this, for the distance of twelve miles, it is five or six miles across, but then again it narrows, and again at the end of a few miles expands. That part called the Broad Lake, because broader than any other, commences about twenty-five miles north of Crown Point, and is eighteen miles across in the widest part. Here the lake is interspersed with a great number of islands, the largest of which, formerly called Grand Isle, now South Hero, is fifteen miles in length, and, on an average, about four in breadth. The soil of this island is fertile, and it is said that five hundred people are settled upon it. The Broad Lake is nearly fifty miles in length and gradually narrows till it terminates in a large river called Chambly, Richlieu, or Sorelle, which runs into the St. Lawrence.

The soundings of Lake Champlain, except at the narrow parts at either end, are in general very deep; in many places sixty and seventy, and in some even one hundred fathoms. In proportion to its breadth and depth, the water is more or less clear; in the broad part it is as pure and transparent as possible. On the west side, as far as Cumberland Bay, the lake is bounded for the most part by steep mountains close to the edge of the water; at Cumberland Bay the ridge of mountains runs off to the northwest, and the shore farther on is low and swampy. The East or Vermont shore is not much elevated, except in a few particular places; at the distance of twelve miles, however, from the lake is a considerable mountain. The shores on both sides are very rocky; where there are mountains these rocks jut out very boldly; but at the east side, where the land is low, they appear but a little above the water. The islands also, for the most part, are surrounded with rocks, in some parts, shelving down into the lake, so that it is dangerous to approach within one or two miles of them at particular sides. From some parts of the eastern shore the rocks also run out in the same manner for a considerable distance. Sailing along the shore when a breeze is blowing, a hollow murmuring noise is always heard from the waters splashing into the crannies of these rocks.

The scenery along various parts of the lake is extremely grand and picturesque, particularly beyond Crown Point; the shores are there beautifully ornamented with hanging woods and rocks, and the mountains on the western side rise up in ranges one behind the other in the most magnificent manner. It was on one of the finest evenings possible that we passed along this part of the lake, and the sun setting in all his glory behind the mountains, spread the richest tints over every part of the prospect; the moon also appearing nearly in the full, shortly after the day had closed, afforded us an opportunity of beholding the surrounding scenery in fresh though less brilliant colours. Our little bark was now gliding smoothly along, whilst every one of us remained wrapt up in silent contemplation of the solemn scene, when suddenly she struck upon one of the shelving rocks; nothing but hurry and confusion was now visible on board, every one lending his assistance; however, at last, with some difficulty, we got her off; but in a minute she struck a second time, and after we had again extricated her, even a third and a fourth time, at last she stuck so fast, that for a short time we despaired of being able to move her. At the end of a quarter of an hour, however, we again fortunately got her into deep water. We had before suspected that our boatman did not know a great deal about the navigation of the lake, and on questioning him now, it came out, that he had been a cobbler all his life, till within the last nine months, when he thought proper to change his business, and turn sailor. All the knowledge he had of the shores of the lake, was what he had picked up during that time, as he sailed straight backward and forward between St. John's and

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* Female Indians.

Skenesborough. On the present occasion he had mistaken one bay for another, and had the waves been as high as they sometimes are, the boat would inevitably have been dashed to pieces.

The humble roof of another judge, a plain Scotch labourer, afforded us shelter for this night. It was nearly eleven o'clock, however, when we got there, and the family having retired to rest, we had to remain rapping and calling at the door for half an hour at least, before we could get admittance. The people at last being roused, opened their doors, cheerfully got us some supper, and prepared their best beds for us. In the morning, having paid our reckoning to the judge, he returned to his plough, and we to our boat to prosecute our voyage.

We set off this day with a remarkable fine breeze, and being desirous of terminating our voyage as soon as possible, of which we began now to be somewhat tired, we stopped but once in the course of the day, and determined to sail on all night. A short time after sunset we passed the boundary between the British dominions and the United States. Here we were brought to by an armed brig of twenty guns, under English colours, stationed for the purpose of examining all boats passing up and down the lake; the answers which we gave to the several questions asked being satisfactory, we were accordingly suffered to proceed. Since the surrender of the posts, pursuant to the late treaty with the United States, this brig has been removed, and laid up at St. John's. When night came on, we wrapped ourselves up in our blankets, as we had done on the first night of our voyage, and laid down upon the cabin floor, where we might possibly have slept until we got to St. John's had we not been awakened at midnight by the loud hollas of the sentinel at the British fort on Isle aux Noix. On examining into the matter, it appeared that the boat had been driven on shore, while our sleepy pilot enjoyed his nap at the helm; and the sentinel, unable to imagine what we were about, seeing the boat run up close under the fort, and suspicious of some attack, I suppose, had turned out the whole guard; by whom, after being examined and re-examined, we were finally dismissed. We now took the command of the boat upon ourselves, for the boatman, although he was more anxious to get to St. John's than any one uf us, and though he had himself in some measure induced us to go on, was so sleepy that he could not keep his eyes open. Relieving each other at the helm, we reached St. John's by day-break; one hundred and fifty miles distant from Skenesborough.

(The End.)

Introduced First Locomotive

(Continued from Page 7)

Liverpool on February 15, and, following some little time spent in studying steam locomotive operation in England, contracted, on April 15, for about 390 tons of rolled iron strap rail and, early in July, for four locomotives—with Robert Stephenson & Company, of Newcastle-on-Tyne, for one, and with Foster, Rastrick & Company, of Stourbridge, for three, the weight of each of which was not to exceed one and one-quarter tons on each wheel.

The Stephenson locomotive, the *America*, was the first to reach America and arrived in New York on January 15, 1829. Its dimensions were:

Builder's number	12	
Type	0-4-0	
Diameter of boiler	49	inches
Length of boiler	9 feet, 6	"
Diameter of cylinders	9	"
Stroke of cylinders	24	"
Firebox	48 by 36	"
Diameter of drivers	48	"
Gauge	4 feet, 3	"
Boiler tubes	2	
Diameter	19	"
Fuel	Anthracite	
Cost (New York)	$3,663.30	

Following a demonstration under steam in New York City on May 27, 1829, it was shipped to Rondout in the steamboat *Congress*, arriving there on July 3. It was started up the canal, clearing from Eddyville on July 16. No record of its arrival at Honesdale, or at any other point on the canal, has been found. It was never put in service and its disposition is still a mystery beyond the finding, in the Smithsonian Institution at Washington, D. C., of one of its cylinders and the iron wheel straps or bands affixed to the spokes between the hubs and tires which had been deposited there under the belief that they were parts of the *Stourbridge Lion* and the latter applied in error to the replica of the wheels of the *Lion* now on the exhibition floor.

The first of the Foster, Rastrick & Company locomotives to arrive was the *Stourbridge Lion* which reached New York on May 13, 1829. Its dimensions were:

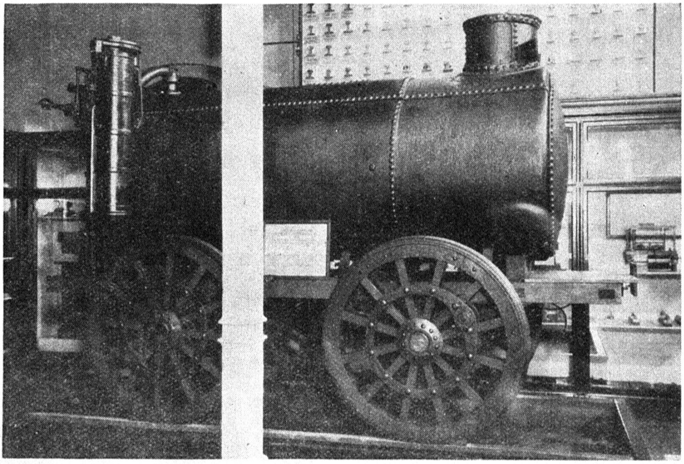
Builder's number	Unknown	
Type	0-4-0	
Diameter of boiler	4 feet, 2	inches
Length of boiler	10 feet, 6	"
Boiler tubes	2	
Diameter of tubes	18	"
Length of tubes	4	feet
Diameter of cylinders	8¾	inches
Stroke of cylinders	3	feet
Firebox (cylindrical)	48 by 28	inches
Diameter of drivers	49	"
Gauge	4 feet, 3	"
Fuel	Anthracite	
Cost (New York)	$2,914.90	

This locomotive, the first to run on an American railroad, was demonstrated under steam in New York City on May 28, 1829, and shipped from New York in the steamboat *Congress* on July 2, arriving at Rondout on July 3. It cleared Eddyville, on the canal, July 16, for Honesdale. The exact date of its arrival at Honesdale is still unknown but was, in all probability, either July 22 or 24. There a tender was added, one of the coal "wagons" of the Company being fitted up for that purpose. It was placed on the track at Honesdale on August 5, made its famous trial trip on August 8, and was found too heavy for the track structure. A second trial was had on September 9, and its operation carefully noted by Mr. Allen who reported the railroad "not sufficiently stable" for its operation and that the road should be strengthened before it could with safety be put in service.

The locomotive was removed from the rails and stored under a rough board shelter for some time and later moved to Carbondale. Many of its parts were worked up for other uses and its boiler was in service in the shop at that place until replaced by one of higher power in the seventies. Subsequently, the boiler was sold and, in the late eighties, located in the foundry yard of Lindsay & Early, at Carbondale, who deposited it in the Smithsonian Institution, Washington, D. C., on June 18, 1889. Other parts of this famous locomotive have, from time to time, been found and added to the boiler, and now stand on the exhibition floor of the National museum, as shown in an accompanying photograph.

The other two Foster, Rastrick & Company locomotives, one the *Delaware* and the other the *Hudson*, were of similar design. The second, either the *Hudson* or the *Delaware*, which is not known, arrived in New York on August 9, 1829, and cost, delivered, $2,944. It was sent to Rondout, part on September 6 and the remainder on September 7, and "placed in store" on September 22.

The third and last, either the *Hudson* or the *Delaware*, arrived in New York on September 17, 1829, and cost, delivered, $2,992.98. It was forwarded to Rondout, part on October 6, and the remainder, the boiler, on October 21. Beyond the statement in the "Story of the Canal," by James S. McEntee, an early engineer on the Company's canal, written in 1874 and appearing in 1910 in the magazine "Old Ulster," published at Kingston, N. Y., in which he states that these two locomotives were finally stored in the "White storehouse near the present Clinton Hall and were burned up in a fire which destroyed the building," no further record of them has been found although intensive research has been made.



The "Stourbridge Lion" as it stands today in the Smithsonian Institution, Washington, D. C.

What Is Portland Cement?

PORTLAND cement is a powder which when mixed with water in the right proportion will form a mass resembling rock in texture, strength and durability. Combine portland cement with water, sand, and pebbles or stones in the proper quantities and it will bind them together with a grip so tenacious that if a portion of this mass be broken off after it is thoroughly hardened, pieces of stone ordinarily will be split open, instead of the cement relaxing its hold on them. This mixture of cement and inert materials is called concrete. It is in effect plastic stone.

Portland cement is so named because the inventor saw a resemblance of the early product to building stone from the Isle of Portland, England. Its name has nothing to do with either Portland, Maine, or Portland, Oregon, although there is a cement plant near the latter city. The name is comparable to Irish potatoes, paris green or sterling silver.

Due to the unbelievably fine pulverizing and the intense heat employed in making cement, physical and chemical changes take place in the original constituents that alter their nature completely. Many processes are involved in changing rock into this powder with its everlasting grip.

There are many brands of portland cement, manufactured to conform to a standard set up by the U. S. Government and the American Society for testing materials.

As distinguished from portland cement, natural cement is made from materials already mixed by nature in approximately the correct proportions. The 1924 production of natural cement in this country was about one per cent of that of portland cement, which was originally developed by makers of the earlier natural cements.

Cement is almost never used alone, but is mixed with water and sand to form mortar, or with water, sand, pebbles, stone or other coarse inert material to make concrete—man-made stone.

Contrary to the ideas of many people, portland cement is not the name of a brand, but designates a type of cement. Nowadays, it is frequently referred to merely as cement, however, because it is so widely used.

Portland cement is made at 137 plants located in twenty-nine states scattered throughout the United States. It is also made in practically every other important country in the world. Each manufacturer has his own brand name preceding the description "portland."

Some forty years ago almost every manufacturer who claimed to make portland cement had his own ideas as to what portland cement was. The different brands were alike only in the same sense that different brands of shoes are alike today. There were individual differences galore. In 1898 there were ninety-two different specifications in use by engineers and builders.

This condition was relieved by cooperation between the leading technical societies, the U. S. Bureau of Standards and the Portland Cement Association. After much study and the testing of tentative standards in use, a single set of specifications was established in 1921. Today all portland cement in this country is manufactured to meet these specifications, approved by the government for its own use.

Other short articles concerning this interesting industry, the first of which will be "Cement's Origin Lost in Antiquity," will be published in subsequent issues of THE BULLETIN through the courtesy of the Portland Cement Association.

Always Treated Fairly

(Continued from Page 4)

ever, none of his generation have been able to learn what disposition was made of the land.

He was born in Schenectady, N. Y., December 29, 1852, and was the only son among four children of Charles A. Miller, who was a partner in a tin store conducted under the firm name of Miller and Lighthall on the site now occupied by the Young Men's Christian Association building in State street. Fifty-two years ago the third of next August, he was married to Miss Allie E. Wolfe of Rochester. Mrs. Borden H. Mills of Albany, wife of the deputy attorney general of New York State, is a daughter, and William W. Miller, in charge of the Industrial department of the General Electric Works at Schenectady, is a son.

He is a member of the Brotherhood of Locomotive Engineers, The Delaware and Hudson Veterans' Association and the Bethany Presbyterian church of Menands.

Former Employe Pensioned

ENOS RODMAN WOODWARD, 76, a passenger pilot on the Ft. Worth & Rio Grande railroad, was retired from service under the age limit on May 25, 1925, according to the February issue of *The Frisco Employes' Magazine.* He was born on a farm at South Canaan, Pa., April 17, 1849, and attended school at Prompton. At the age of seventeen, he entered the employ of our Company as a brakeman, but, in 1870, went to the Erie railroad where he worked in a similar capacity and later became a conductor. In 1885, he joined the forces of the Texas and Pacific as a brakeman and some time later was promoted to the position of conductor. His service with the Frisco lines began on February 9, 1907, as a passenger pilot in which capacity he continued to be employed until the time of his retirement.

In October, 1871, he married Julia Griner of Prompton, who died on May 8, 1916, leaving, beside the husband, two daughters and two sons. He has since resided at No. 1400 Cooper street, Ft. Worth, Texas.

The Value of Per-Diem

I would like to call attention to a single little word
That there's not a railroader living can say he never heard.
The mudhop and the callboy—the conductor and the crew—
The agent and yardmasters are all familiar with it, too.

It's a word of seven letters with a hyphen in between,
But what a lot of dollars this little word can mean.
And it's known to all employes by the little word "Per-Diem."

Per-Diem is just a dollar that this railroad has to pay
For each piece of foreign rolling stock that stays with us a day.
We've got to spend a good hard buck for every load or light
That lingers on our right-of-way past twelve o'clock at night.

It doesn't sound much for that foreigner you've got down on the "Hold,"
Or that bunch of plate mill empties that's getting kinda old—
Or that pair of flats at the structural that's waiting for a trip,
Or the half-a-dozen foreigners that's standing on the rip.

But when you count this station and the other stations, too—
Try to see the hole it's eating in the railroad's revenue.
Shake a leg and get them moving; never let a stranger stop
Till it's got a load and going with a waybill right on top.

When you find a foreign flat wheel making rust spots on the rail,
Find out why it ain't a-moving and then step on its tail.
Keep 'em moving—keep 'em stepping, if you have to run 'em hot—
For each day costs just a dollar when they're standing on the spot.

—*Anonymous.*

Language — The Medium of Human Exchange

(Continued from Page 6)

It also involves such control of your faculties as will enable you to adapt your methods to the case in hand. Such power can come to you only through systematic observation and effort.

From time to time we are going to be called upon to speak on certain subjects. When we are so called upon, let us not belittle ourselves by showing any doubt of our ability to handle the subject. Let us not begin with, "*I don't know that I am very well qualified to speak on this subject, but—.*" It is doubtless a feeling of modesty that prompts such an apology, but it is a very unfortunate one. The speaker who uses it disparages his own efforts at the start. But worse than that, and that is what he doesn't stop to consider, he casts a doubt on the wisdom of those who asked him to speak. If those who have charge of the conduct of these meetings have confidence in your ability to present or discuss a subject you certainly should do everything in your power to justify that confidence. Have the courage of your convictions, and be imbued with determination to do the best that is in you, to meet the demands of the situation as well as you can. We are not by any means perfect. Even though you fall short of a perfect performance your audience will, I believe, give you the tribute which it is stated is inscribed on a grave stone in the far West, "He did his damndest, Angels could do no more?"

Only a coward takes it sitting down. Run if you must, fight if you can, but for heaven's sake, get up.—Clipped.

Random Shots

I SHOT an arrow into the air, it fell in the distance, I knew not where, till a neighbor said that it killed his calf, and I had to pay him six and a half ($6.50). I bought some poison to slay some rats, and a neighbor swore that it killed his cats; and, rather than argue across the fence, I paid him four dollars and fifty cents ($4.50). One night I set sailing a toy balloon, and hoped it would soar till it reached the moon, but the candle fell out on a farmer's straw, and he said I must settle or go to law. And that is the way with the random shot; it never hits in the proper spot; and the joke you spring, that you think so smart, may leave a wound in some fellow's heart.—*Emporia Gazette.*

Clicks from the Rails

Shortens Engineers' Lives

"You can't tell," says a Missouri Pacific engineer, "what motorists will do. Some of them tantalize us by driving up to a crossing at full speed in sight of an approaching train and then, just as a crash seems unavoidable and the engineer is putting on the brakes for all he's worth, come to a sudden stop and laugh. They think they have done something smart, but it sure shortens the life of an engineer. Other motorists approach more slowly and then speed up just before they reach the crossing in an effort to beat the train. These are the ones usually involved in crossing crashes."

And a newspaper exchange adds: "The fool driver who teases the engineer for the sake of laughing at him almost deserves to be killed. Nevertheless, engineers are not killers. They do everything in their power to prevent accidents."

* * *

Longest Railroad Service

Express train service extending more than one-third of the way around the globe in eleven days, and touching five world capitals, will be started May 15 between London, Paris, Berlin and Vladivostock, Siberia, as the result of agreements reached between the German, Polish and Soviet governments, says an Associated Press dispatch. Through service between Berlin and Vladivostock by way of Warsaw, Riga and Leningrad, will take ten days and cover a distance of 8,694 miles. From London to Vladivostock the time required will be ten days, eighteen hours, and the journey from Paris to Vladivostock may be completed in eleven days. The latter route covers approximately 9,400 miles and is reputed to be the longest continuous railway service in the world. Trains will run daily.

* * *

Remarkable Bridge Structure

Across Newark bay, The Central Railroad of New Jersey is building a bridge, at an approximate cost of $15,000,000, which is in many respects a remarkable structure. It is 7,411 feet long and carries four tracks, but as it is being built substantially in the form of duplicate double bridges, it represents nearly three miles of two-track bridge. It ranks among the largest structures of the kind in the country, in point of quantity of steel used.

* * *

"The story of America's development has been a railroad story."—C. H. Markham.

Lack of Railroads Caused War

Students of American history ascribe as one of the causes of the Civil War the absence of railroads north and south. Most of the roads before 1860 ran east and west, few north and south. Consequently, the two sections lacked the facilities for intercommunication and a better understanding.

The present network of railroads and State highways, making travel by train and touring by automobile easy, is doing much to knit this country into closer unity. The closer in touch the different parts of the country are the less foolish sectionalism there will be.—*Norwalk (O.) News.*

* * *

Illinois Central 75 Years Old

Seventy-five years ago, or on February 10, 1851, the charter of the Illinois Central system was signed. Beginning with 705½ miles of charter lines the system has since grown into one of 8,500 miles, and serves fifteen states of the Middle West and South, and includes, also, the Ocean Steamship Company operating a fleet of eight ships between Savannah, Ga., and New York and Boston.

* * *

Railroad Most Economical Carrier

At the bottom of all this matter is the stubborn fact that it actually costs more to move a ton of freight by burning gasoline than it does by consuming coal. The railroad is fundamentally the most economical carrier we have in the country, and time will startingly demonstrate that fact.—Jacksonville, Fla., *Times Union.*

* * *

Adopts Group Insurance

Four million dollars worth of life and accident insurance has been contracted by the Gulf, Mobile and Northern railroad, under a group plan, for the benefit of its employes. The Metropolitan Life Insurance Company is the underwriter and the plan includes, among other features, the free nursing service.

* * *

While not anxious to see any established business enterprise suffer a reversal, railroad employes, nevertheless, will be interested in an item that appeared in a recently government report, to the effect that "The production of artificial arms and legs decreased 25.7 per cent in the United States from 1919 to 1922.

For Greater Safety

With a view to bringing about still greater safety and comfort to passengers, as well as a still greater reduction in loss and damage to freight and equipment, the American Railway Association is now conducting, at Purdue university, the most complete and elaborate series of tests of train brakes ever undertaken. Owing to the broad scope taken by this study, a building, thirty-five feet wide and one hundred feet long, adjacent to the testing laboratories, is being used and is equipped with the complete airbrake equipment of two modern locomotives as well as that of one hundred freight cars so that the tests will be equivalent to the conditions to be found in the actual operation of a train consisting of that number of locomotives and cars. Every phase of airbrake operation is to be studied in detail.

* * *

Just Fair Weather Conveyances

That the motor bus and motor truck are still fair weather conveyances was well demonstrated during the recent heavy fall of snow. Not a wheel turned on many such routes for days, but railroad trains maintained their schedules in a remarkable way, meanwhile taking care of travelers who at other times spurn their service.

* * *

New York Has 8,295 Crossings

New York State has a total of 7,504 grade crossings according to a recent survey made by the Public Service Commission. In 791 instances highways cross sidings and spurs, making a grand total of 8,295. During 1924, thirty-nine crossings were eliminated and fourteen similar projects were gotten under way.

* * *

Flagman An Embroidery Expert

Joseph H. Achenbach, crossing watchman for the Reading company at Palmyra, is the embroidery champion of the system. While recuperating from an injury in 1907, he began a study of the art and since has become so proficient that the ladies of his immediate neighborhood flock to him to learn the latest stitches.

* * *

Twenty-one Class One railroads operated at a loss during the month of November, last, of which fourteen were in the Eastern district, one in the Southern and six in the Western.

Trouble

Trouble has a trick of coming
Butt end first;
Viewed approaching then you've seen it
At its worst.
Once surmounted, straight it waxes
Ever small,
And it tapers till there's nothing
Left at all!
So, whene'er a difficulty
May impend,
Just remember you are facing
The butt end;
And that looking back upon it,
Like as not,
You will marvel at beholding
Just a dot!

— *Clipped.*